Work Order ID 70173 Monday May 30, 2011 1:50:47 PM						The state of the s				Page
Item ID: D3391-025 Revision ID:	, it	Acc	ept				s	etup Star	t	
Item Name: Aft Tube Assembly				•.			.	Stop		
Start Date: 5/31/2011 Start Qty: 1.00 Required Date: 6/10/2011 Req'd Qty: 1.00	1124		*	Cust Item II Customer:) :	· Span				
Approvals: Process Plan: QC:	Date: _//~ @	<i>05-3</i> 0	pooling: \$\frac{1}{2} \frac{1}{2} \frac{1}	Dar Dar			R	tun Star Stop		
Sequence ID/ Operation Work Center ID Description		* *	Set Up/ Run Hours	Tool ID		Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr Revision Nbr			٥.							
D3391 Rev H/ DEO							-			
MORI SEIKI CNC LATI Mori Seiki Memo		\$	0.00			,		Ø		
Mori Seiki CNC Lathe Large Turn as per	Folio FA599 atch# on fwd end	Rev: 41& [Owg D3391 Rev:	979971	11/0	6/66	Ô			
QC2- Inspect parts off m	achine FAI/FAIB		0.00 and	11/06/04				ler	- 2e	
QC Memo Quality Control	ŧ		0.00						*	•

QC8- Inspect parts - second check

Quality Control

Memo

W/O:			· W	ORK ORDER CHANGES					
DATE	STEP	PROC	EDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	-			· · · · · · · · · · · · · · · · · · ·					
							1		
Part No:	D37	591-025 PAR #: NA	Fault Ca	tegory: Machining NCI	R: (Yes)	lo DQA	A: <u>#</u>	<u>-</u> Date: _	11.06,27
680		esolution: Go DD AS 13 / Re work	Disposit	ion: breeze as if /levert QA	: N/C Clo	sed:	4	Date: <u>1</u>	406/27
NCR:	1173	W	ORK OR	DER NON-CONFORMANCE	(NCR))			
DATE	STEP	Description of NC		Corrective Action Section B	Cian 0	Verific	ation	Approval	Approval
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC inspector
11.UL.U8	120	Part due to Vibration. Affected area 0.7" × 0.2"	11,66.04	Remove met 1 to remove effected area. Remove from apposite side to make symmetrical, Fund corner top under	Man, V	Cons	2	a c	
		R.C. Process / tooling	11.06.09 PS141	symmetrical, Find corner to under nu stress is acceptable.	\\ \(\(\) \(11/04	122	057042	World
·				,					
NOTE: D	ate & initi	al all entries							

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 70173 Monday, May 30, 2011 1:50:48 PM D3391-025 Item ID: **Revision ID:** Item Name: Aft Tube Assembly **Start Date:** 5/31/2011 **Start Qty:** 1.00 Required Date: 6/10/2011 Req'd Qty: 1.00 Reference: Approvals: Sequence ID/

Accept

Setup Start

Stop

Cust Item ID:

Customer:

Process Plan:

Date: Tooling:

Date:

Run

Start

Date:_____

SPC (Y/N):

Date:

Code

Stop

Number Stamp

Insp.

Work Center ID

120

HAAS 1

HAAS CNC vertical machine #1

Operation Description

Set Up/ **Run Hours**

0.00

0.00

1-Machine as per Folio FA 599 Rev: AL& Dwg D3391 Rev:

Tool ID

Tool # Plan

Qty

Accept

Reject

Qty

Reject

130

140



QC

QC2- Inspect parts off machine FAI/FAIB

2-Deburr

HAAS CNC VERTICAL MACHINING #1

0.00

0.00

ml 11/04/208

Quality Control

QC8- Inspect parts - second check

Memo

0.00

PQ 11. C. 8

Memo

0.00

Quality Control

W/O:			W	ORK ORDER CHANG	ES					
DATE	STEP	PRO	CEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								,		
				•	4					
					. !			,		
		``````````````````````````````````````								
· · · · · · · · · · · · · · · · · · ·										
Part No	·	PAR #:	Fault Cate	egory:	_ NCF	R: Yes N	lo <b>DQ</b> /	<b>A</b> :	_ Date: _	·
	R	PAR #: Pault Category: NCR: Yes No DQA: Resolution: Disposition: QA: N/C Closed:					Date: _			
NCR:		V	VORK ORE	ER NON-CONFORMA	ANCE	(NCR)				
DATE	STEP	Description of NC	Description of NC Corrective Action		on B		Verific	ation	Approval	Approval
DAIL	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector
₹•					-					
							·			
										`
							!	•	, 	
		1		, .						
} *										

#### Work Order ID 70173

Monday, May 30,2011 1:50:48 PM



Page 3

Item ID:

D3391-025

Accept



Setup Start



**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** 

Required Date: 6/10/2011

5/31/2011

Start Qty: 1.00

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Tool ID

Reference:

Approvals:

Process Plan: _____ Date: ____ Tooling: QC: Date:

SPC (Y/N):

Date:

Date:

Tool # Plan

Code

Run

Start

Reject

Stop

Reject

Qty

Stop

Number Stamp

Insp.

Sequence ID/

Work Center ID

150

Skidtubes

Skidtubes

**Operation** Description

Set Up/ **Run Hours** 

0.00

Skidtubes

Memo

0.00

1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803

Accept

Qty

160

CNC Bend 1

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

Memo

Memo

0.00

0.00

Form as per Dwg D3391 Using Bend Prog 3391025

11-6-9

170

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

	, oop, aoc								
W/O:			W	ORK ORDER CHANGES	<b>3</b>				
DATE	STEP	PROC	EDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						`.	,	-	
						· •		·	
Part No	·	PAR #:	_ Fault Cat	tegory:	NCR: Yes No DQA: Date: QA: N/C Closed: Date:				
	R	esolution:	_ Dispositi	ion:	QA: N/C C	closed:	·	Date:	
NCR:		· W	ORK ORI	DER NON-CONFORMAN					
DATE	STEP	Description of NC		Corrective Action Section B		Verific	ation	Approval	Approval
DAIL	SILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date		on C	Chief Eng	QC Inspector
					1				
		, ,							,
<del>-</del>									
į			:						
		·		t to the second					

#### Work Order ID 70173

Monday, May 30, 2011 1:50:48 PM



Page 4

Item ID:

D3391-025

Accept



Setup Start



Stop

**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** 

5/31/2011

OC:

Start Qty: 1.00

Required Date: 6/10/2011

Reg'd Oty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

А	D	D	ro	va	ıls:

Process Plan:

Date:

Date:

Tooling:

Date:

Run Start



SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

180



Skidtubes

Skidtubes

Operation Description Set Up/ **Run Hours** 

0.00

Tool ID

Tool # Plan

Accept Qty Code

Reject Qty

Reject

Insp. Number Stamp

Skidtubes

Memo

0.00

1-Open Aft cap pilot hole to .208" as per Dwg D3391

2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.

3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217 Wearplate Jig

*****Do Not Open To Finished Size****

4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2 previously drilled aft wearplate holes.

5-Open wearplate holes to 0.250" and c'bore as per dwg D3391

6-Open up all wearshoe, wearplate to 0.297" and float bag holes to 0.328" as per Dwg D3391.

7-Deburr

W/O:			W	ORK ORDER CHANGE	ES			
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date Q	ty Approval Chief Eng / Prod Mgr	Approval QC Inspector
				ry: NCR: Yes No DQA: Date: QC Ins  NCR: Yes No DQA: Date: QA: N/C Closed: Date: Production B				
	:	,						
Part No: PAR #: Fault Category: NCR: Yes No DQA: Date:								
	R	esolution:	Dispositio	n:	QA: N/C Clo	sed:	Date: _	
NCR:		V	WORK ORD	ER NON-CONFORMA	NCE (NCR)	1		
DATE	STEP	Description of NC Corrective Action				Verification	n Approval	Approval
	O.L.	Section A	Initial Chief Eng			Section C	Chief Eng	QC Inspector
						·	1	
						£**		
							·	
					1			
.,								

#### Work Order ID 70173

Monday,: May 30, 2011 1:50:48 PM



Page 5

Item ID:

D3391-025

Accept

Setup Start

Stop



**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** 

Required Date: 6/10/2011

5/31/2011

Start Qty: 1.00

Reg'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan: Date: Tooling:

Date:

SPC (Y/N):

Date:

Date:

Start Run



Stop

Sequence ID/

**Work Center ID** 

190

200

Operation Description

QC:

QC5- Inspect part completeness to step on W/O

Memo

Set Up/ **Run Hours** 

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

Quality Control

Chemical Conversion Coat per OSI005 4.1

0.00

0.00

210

HandFinish

Hand Finishing

QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

Memo

0.00

	Johan	J = 1.G							
W/O:			W	ORK ORDER CHANGE	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						•			
							,		
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	CR: Yes No DQA: Date:			
<b>-</b>	Resolution: Disposition:					closed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC			n B	Verific	ation	Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Secti	on C	Chief Eng	QC Inspector
				41900					
					ļ				
	,								
. ,									

#### Work Order ID 70173 Monday, May 30, 2011 1:50:48 PM

Page 6

Item ID:

D3391-025

Accept

Setup Start



**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** 

5/31/2011

Start Qty: 1.00

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Tool ID

Reference:

A	n	n	r	)V	2	s:	

Process Plan:

Date:_____

Tooling:

Date:

Run

Reject

Qty

Start

Reject

Number

Stop



Required Date: 6/10/2011

Date:

SPC (Y/N):

Date:

Tool # Plan

Code

Stop



Insp.

Stamp

Sequence ID/ **Work Center ID** 

220

Skidtubes

Skidtubes

Operation Description

Skidtubes

Set Up/

0.00

Memo

Instal spacers as per dwg D3391

A/R Magnabond 6398 Batch: MILO677

**Run Hours** 

exp. date://-8-30

cure time 12hrs as per QSI0015

0.00

11-6-10

Accept

Qty

230



Quality Control

QC5- Inspect part completeness to step on W/O

0.00

235



HandFinish

Hand Finishing

Pressure Wash per OSI005 4.3

Memo

Memo

0.00

0.00

AND REALODINE AS PER PAR09-043

_1 \$ It 1/06/1-

Dail Aci	ospace	Liu							
W/O:			W	ORK ORDER CHANG	ES				
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							,		
Part No	•	PAR #:	Fault Car	tegory:	NCR: Yes No DQA: Date: _				
	R	esolution:	Disposit	ion:	_ QA: N/C CI	osed:		Date: _	
NCR:		V	VORK OR	DER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action   Section   Initial   Action Description			cation	Approval	Approval
		Section A	Chief Eng	Chief Eng	Sign 8 Date	Secti	ion C	Chief Eng	QC Inspector
·	,								
		<u>.</u>					· · · · - · ·		

#### Work Order ID 70173

Monday, May 30, 2011 1:50:48 PM



Page 7

Item ID:

D3391-025

Accept

Setup Start

Stop



**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** Required Date: 6/10/2011

5/31/2011

Start Qty: 1.00

**Reg'd Oty:** 1.00

**Cust Item ID:** 

**Customer:** 

**Tool ID** 

Reference:

Approvals:

Process Plan: _____ Date:

Date: _____

Tooling: SPC (Y/N):

0.00

Set Up/

**Run Hours** 

Date:

Date:

Tool # Plan

Code

Run

Start

Stop

Reject

Number



Reject

Qty

Insp.

Stamp

Sequence ID/

Work Center ID

240

Powdercoat

Powder Coating

250

QC

Quality Control

Operation Description

QC:

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

START TIME:

OVEN TEMPERATURE

QC3- Inspect Part Finish

Memo

0.00

0.00

Accept

Qty

. 1 & Muloclia

260

Hand Finishing

HandFinishing

✓-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/R Sikaflex-241/-291 // 116 5/6 Sikaflex expiry date: 15101

1 6 H uloch

0.00

0.00

Duit Ac	ospaoi	Liu								
W/O:			W	ORK ORDER CHANG	GES					
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву		Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
•	-		·							
Part No	:	PAR #:	Fault Cate	gory:	NCR: Ye	es N	o <b>DQ</b>	A:	Date: _	
	R	esolution:	Dispositio	n:	QA: N/C	Clos	sed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORM	ANCE (N	CR)				
DATE	STEP	Description of NC		tion B		Verific	ation	Approval	Approval	
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng		n & ate	Section C		Chief Eng	QC Inspector
,										
,					1					

#### Work Order ID 70173

Monday, May 30, 2011 1:50:48 PM



Page 8

Item ID:

D3391-025

Accept

Accept

Qty

Setup Start

Stop



**Revision ID:** 

Item Name:

Aft Tube Assembly

**Start Date:** 

Required Date: 6/10/2011

5/31/2011

QC:

Start Oty: 1.00

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

**Tool ID** 

Reference:

Process Plan:

Date:

Date:

Tooling:

0.00

SPC (Y/N):

Set Up/

**Run Hours** 

Date:

Tool # Plan

Code

Date:

Run Start

Reject

Qty



Number Stamp

Insp.

Stop

Reject

Sequence ID/

**Work Center ID** 

270

QC

Quality Control

١. 280

Packaging

Packaging

Operation Description

QC5- Inspect part completeness to step on W/O

Memo

Identify as per dwg & Stock Location.

Memo

0.00

D412-742-043/B70179

290

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

MF 11-06-22

<b>D</b> uit 710	. oopao	Liu							
W/O:			W	ORK ORDER CHANG	ES				
DATE	STEP	PROC	EDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				•					
Part No	:	PAR #:	_ Fault Cate	egory:	NCR: Yes No DQA: Date:				
		esolution:							
NCR:		W	ORK ORE	ER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC	Corrective Action Section B			Verifi	cation	Approval	Approval
DAIL	SIEF	Section A .	Initial Chief Eng	Action Description Chief Eng	Sign Dat		ion C		QC Inspector
									·
`		·							
		·							

## *Picklist Print

Monday, May 30, 2011 1:50:43 PM

Work Order ID: 70173

D3391-025 Parent Item:

Parent Item Name: Aft Tube Assembly



Start Date: 5/31/2011

Start Qty: 1.00

Required Date: 6/10/2011

Page 1

Required Qty: 1.00

**Comments:** 

IPP Rev B 06-02-07

IPP Rev:C 06-03-28

ECN773 dwg rev. D EC

Update Manuf. Instructions JLM 🗆 🗆

IPP rev D 07.03.20 IPP rev E

revF dwg 07.11.07

EC

rev G dwg ecn 1053p EC verified by: DD

DD verified by: EC IPP Rev:F 07-11-13 ECN 1056 IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6014-090		Manufactured	No			100	Each	7.0000	1	1			
				Location	Į.	Loc	<u>Oty</u>	Loc Code		•		. '	
D3670-4-200	1	Manufactured	No	LG 	56572	230	7 7 Each	59.0000	4	4	. Mam.	L 11/	6/1
SPACER D2646		Manufactured	No	LG LG	68950	<u>Loc</u> •	<b>Qty</b> 59 59 Each	<b>Loc Code</b> 36.0000				//-(	, -/
Aft Cap				<u>Location</u> FP006		Loc	<u>Qty</u> 35	Loc Code	<b>                                  </b>	<u> </u>	10611	16	

62678. 35 FP-4 69019

Duit Au	oopaoc	Lu								
W/O:			V	VORK ORDER CHANGE	S					
DATE	STEP	PROC	CEDURE CHANGE			у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		, <del>"</del>								
				•						
									`-	
Part No	:	PAR #:	Fault Ca	itegory:	NCR:	∕es N	lo <b>DQ</b>	A:	_ Date: _	
	R	esolution:	Disposit	lion:	QA: N/	C Clo	sed:		Date: _	
NCR:		W	ORK OR	DER NON-CONFORMAL	NCE (N	ICR)				
		Description of NC		Corrective Action Section	ı B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		ign & Date		on C	Chief Eng	QC Inspector
	:								κ.	
									,	
		,								
J	I	1	i		1		ı		1	I

Monday, May 30, 2011 1:50:43 PM

Work Order ID: 70173 Parent Item: D3391-025 Parent Item Name: Aft Tube Assembly Start Date: 5/31/2011 **Required Date: 6/10/2011** Start Qty: 1.00 Required Qty: 1.00 D3537-1 Manufactured No 270 Each 6.0000 Wearpad Location Loc Oty Loc Code FP017 B69817 63313 2 66935 4 D3537-7 270 4.0000 Manufactured No Each Wearpad Location Loc Oty Loc Code 1369320 FP017 65146 4 D3553-1 270 16.0000 Manufactured No Each Gasket Loc Oty Loc Code Location FP013 16 16 D3553-3 270 40.0000 Manufactured No Each Gasket Location Loc Qty Loc Code FP 20 31631 20 FP013 20 53480 20

	1								
W/O:			V	ORK ORDER CHANGE	S			-	
DATE	STEP	PROC	EDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						¨			
								,	
Part No	•	PAR #:	_ Fault Ca	tegory:	NCR: Yes	No DQ	A:	_ Date: _	
		esolution:							
NCR:		W	ORK OR	DER NON-CONFORMAN	ICE (NCF	R)			- Control of the Cont
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	Sign & Date	& Secti	cation on C	Approval Chief Eng	Approval QC inspector
								·	
	-								
								·	
		·							
							· -		
		3 -							

Monday, May 30, 2011 1:50:43 PM

Work Order ID: 70173 D3391-025 Parent Item: Parent Item Name: Aft Tube Assembly Start Date: 5/31/2011 Required Date: 6/10/2011 Start Qty: 1.00 Required Qty: 1.00 D3672-1 Manufactured No 270 Each 1,204.000 2 Phenolic Washer Location Loc Qty Loc Code ST074 1204 ¥2 64177 704 66821 500 ALS4-1032-130 Purchased No 260 Each 2,232.000 14 Insert Location Loc Qty Loc Code ST281 242 117331 242 ST282 1990 117717 1990 ALS4-1032-225 Purchased No 270 Each 1,437.000 12 12 Insert Location Loc Qty Loc Code ST282 1437 110768 637 XIZ 117717 800 AN3C4A No 270 2,361.000 Purchased Each 11/06/16 **BOLT** Location Loc Qty Loc Code ST350 2361 X Le 117094 955 117313 106 117688 800 117795 500

	- Copaco									
W/O:			W	ORK ORDER CHA	NGES	,				·
DATE	STEP	PRO	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						`.		•	,	
Part No	•	PAR #:	Fault Cate	egory:	NC	R: Yes	No DQ	<b>A</b> :	Date:	
	Re	esolution:	Disposition	on:	QA	: N/C CI	osed:		Date: _	
NCR:	į.		WORK ORD	ER NON-CONFOR	MANCE	(NCR				
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action  Action Description  Chief Eng	Section B	Sign &	Verific Section	ation	Approval Chief Eng	Approval QC Inspector
			Chief Elig	Chilei Eng		Date				
			· · · · · · · · · · · · · · · · · · ·		<del></del>					
·										
							:			
ł	} I		1 1			1	1		I	1

'n.	r i	<b>A</b>	D .	- 4
Pic	K	list	Pri	nt

Monday, May 30, 2011 1:50:43 PM

Page 4

Work Order ID: 70173

Parent Item:

D3391-025

Parent Item Name: Aft Tube Assembly



**Start Date:** 5/31/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

270

Each

1,384.000

Bolt

<b>Location</b>	<u>Lo</u>	c Qty	Loc Code		
FP-A		7		_	
115835		7			
ST350		1377		_	
116419		220			
116549		57			
117343		500			
117508		300			X4
117764		300			
	270	Each	0.0000	10	10

AN960C10L

NAS1149C0332 Purchased

No



M117291 (210) Me 1/06/16

washer

	oopase									
W/O:			W	ORK ORDER CHANGE	ES					
DATE	STEP	PRO	CEDURE CH	ANGE	E	у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					:				·	
Part No	•	PAR #:	Fault Cate	egory:	NCR:	Yes N	lo <b>DQ</b>	A:	Date: _	I
	R	esolution:	Disposition	on:	QA: N	C Clo	sed:		Date: _	
NCR:		V	VORK ORD	ER NON-CONFORMA	NCE (	VCR)				
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	S	ign & Date	Verific Secti	cation on C	Approval Chief Eng	Approval QC Inspector
			Sinor Eng	Office Eng						

DART AEROSPACE LTD	Work Order:	10/17
Description: Float Skidtube (412)	Part Number:	D3391-3
Inspection Dwg: D3391 Rev: H	·	Page 1 of 1

#### FIRST ARTICLE INSPECTION CHECKLIST

	1 '	
, X	First Article	Prototype
, X	First Article	Prototy

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
		Lat	he Section	n		
14.000	+/-0.010	14,000			tape	FC-II
3.500	+/-0.010	3500	V		Vern	JF-01
88.93	+/-0.030	88.930			tape	EC-11
44.995	+/-0.030	44,995		e ve 17	tape	MM.L-02
Ø3.200	+/-0.010	3.198		4,	vern	JF:01
88.93	+/-0.030	88.93	V **		tape	EC-11
Ø3.750	+/-0.010	3.749		. My	nisc	CNC-05
30° x 160" chamfer	+/-0.010	30° × 160"				200

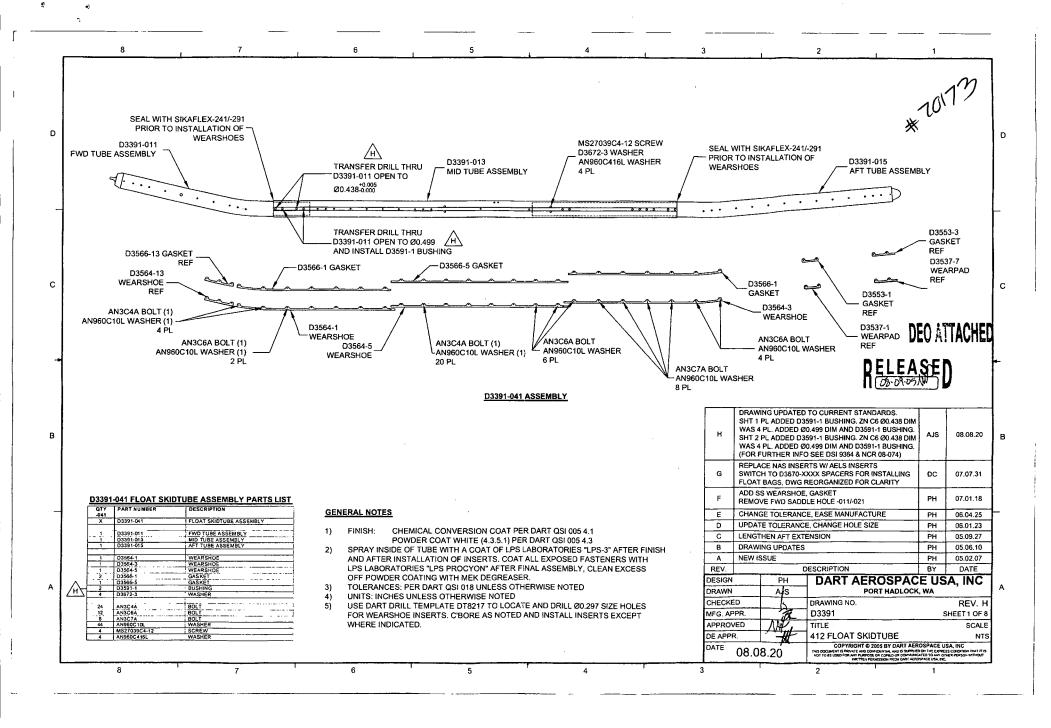
Measured by: Audited by: HAAS Section +0.000/-0.030 Vern Ml-7 1.526 .506 +/-0.010 7.500 +/-0.010 27.750 31.750 +/-0.010 35.250 +/-0.010 Vern ML-7 3.300 +/-0.010 0.200 +/-0.010 203 3.520 +/-0.010 3,528 +0.010/-0.000 0.687 R0.062 +/-0.010 Ø0.484 +0.005/-0.001

Measured by: 🎢	SI ONL	•	Date: 1/06/08
		1 -	
Audited by:	K9		Date: 11. C. Y

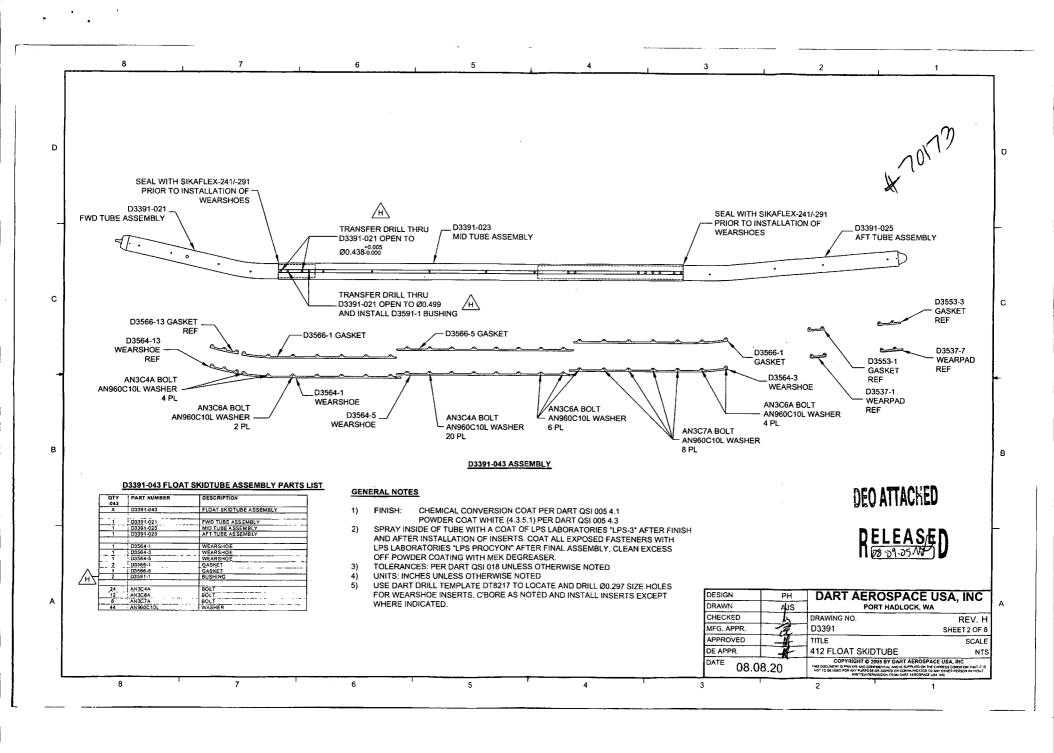
Rev	Date	Change	Revised by	Approved
> A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
В	06.06.19	Dwg revision update	KJ/JLM	
С	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	31
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM , L	1.1
G	09.11.16	Dimension 0.200 removed	KJ KJ	$\Delta \Lambda$

Dart Ae	rospac	e Ltd				i v E		
W/O:				WORK ORDER (	HANGES			4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
DATE	STEP		PR	OCEDURE CHANGE	"Ву	Date Q	ty Approval Chief Eng / Prod Mgr	Approval Conspector
• .	(							
· · · · · · · · · · · · · · · · · · ·	of.	1					3.6	
Part No	:		PAR #:	Fault Category:	, and a second	S. A.S.	Date: _	
	R	lesolution:		Disposition:	QA: N/C	Closed:	Date: _	· · · · · · · · · · · · · · · · · · ·
NCR:			÷.	WORK ORDER NON-CON	FORMANCE (N	CR)		
DATE	STEP		ption of NC ection A	Corrective Action Description	Section B	Verification C	,	Approval QC inspector

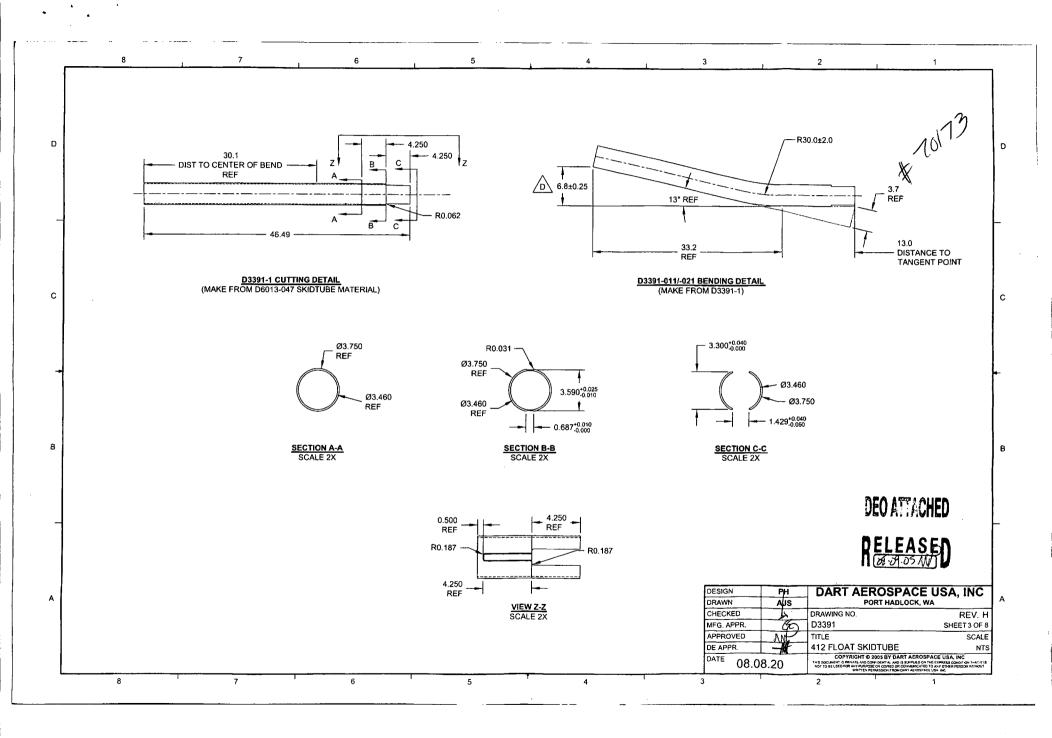
		Description of NC		Corrective Action Section B		Verification		A
DATE	STEP	Section A	Initial Chief Eng	Action Description		Section C	Approval Chief Eng	Approval QC Inspector
							-	
					The way to			
				real real real real real real real real				
			• /	-A		X		
in the same of the	***				·	4		11



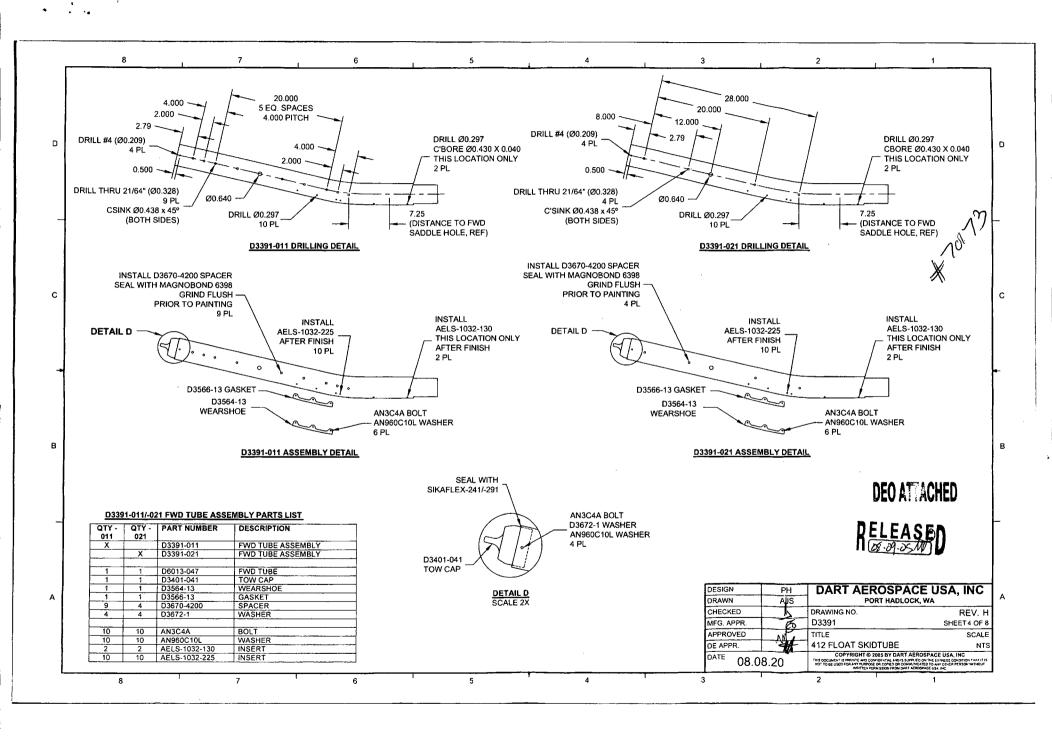
Duit Aci	ospace	Liu						•	
W/O:			WC	ORK ORDER CHANG	ES		-		
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			•						
Part No	•	PAR #:	Fault Cate	gory:	_ NCR: Yes				
	R	esolution:	Disposition	n:	_ QA: N/C C	losed:		Date: _	·
NCR:			ER NON-CONFORM	ANCE (NC	₹)				
DATE	STEP	Description of NC			tion B	Verific	cation	Approval	Approval
DAIL	JILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date		ion C	Chief Eng	QC Inspector
	:								
								·	
		•							i



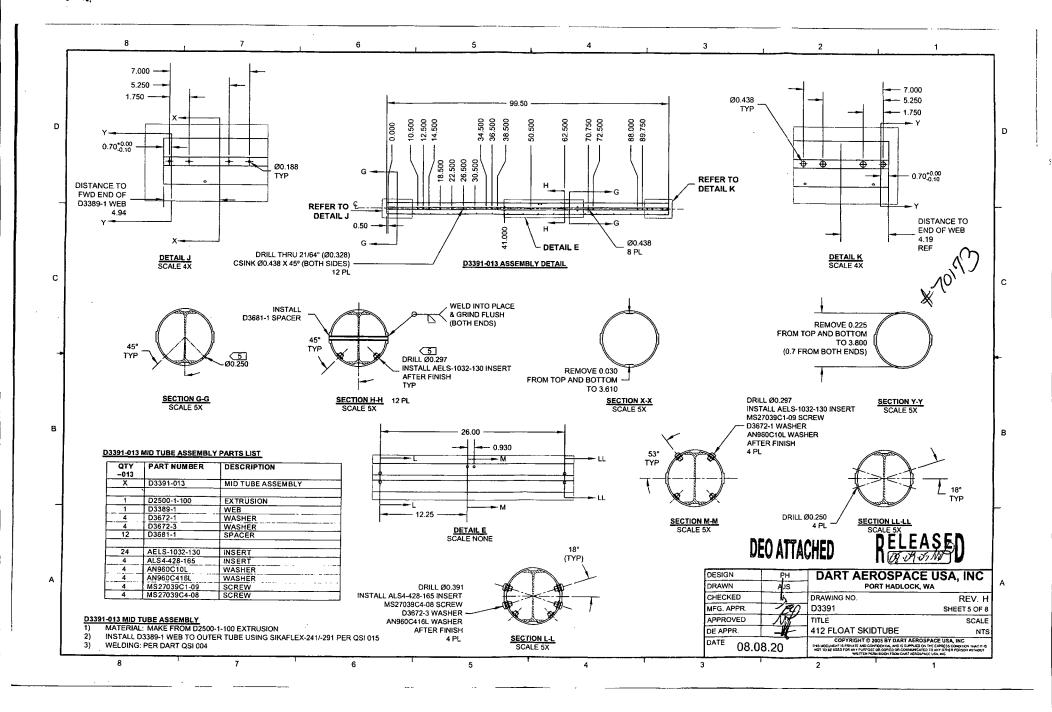
W/O:			WO	RK ORDER CHANGE	S				
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			,						
Part No.	<u>.                                    </u>	DAD #.	Fault Catas		NCD: Vac	No DO	Α.	Data	
Part NO	Part No: PAR #:								
								Date	
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NC)	4)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign a		ion C	Chief Eng	QC inspector
ı 									
					ì				
		,							



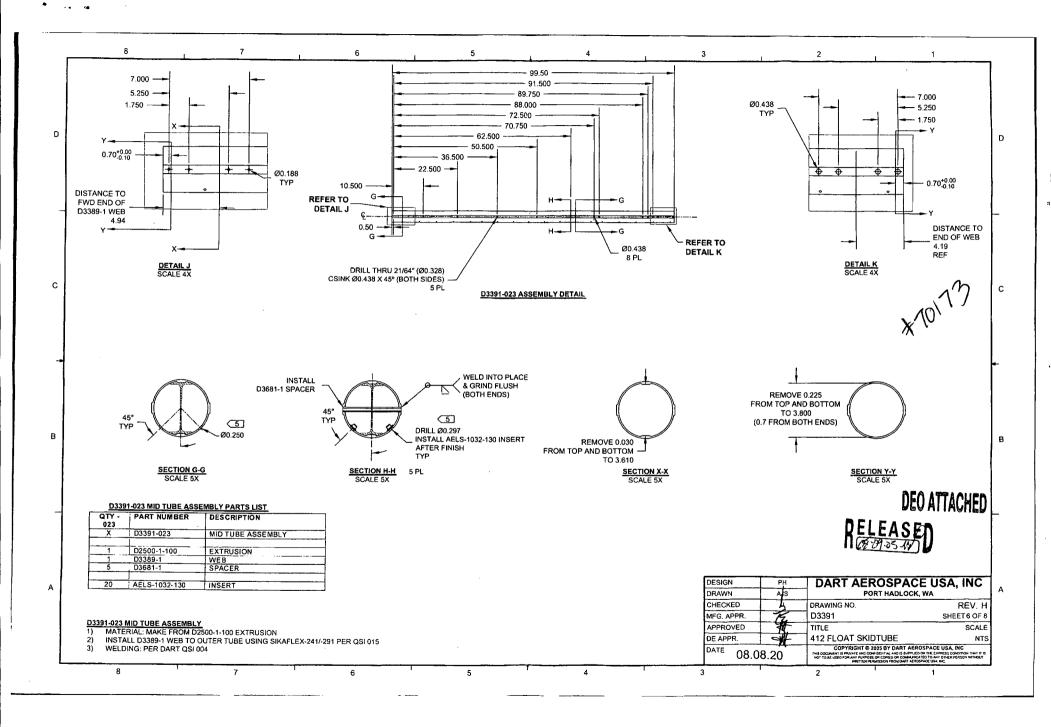
	oopas	<i>-</i> = 10							•
W/O:			W	ORK ORDER CHANGI	ES				
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No <b>DQ</b>	A:	Date: _	
	Resolution:			n:	_ QA: N/C C	losed:		Date: _	<del></del>
NCR:		V	WORK ORD	ER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
DAIL	J.L.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date		on C	Chief Eng	QC Inspector
		·							



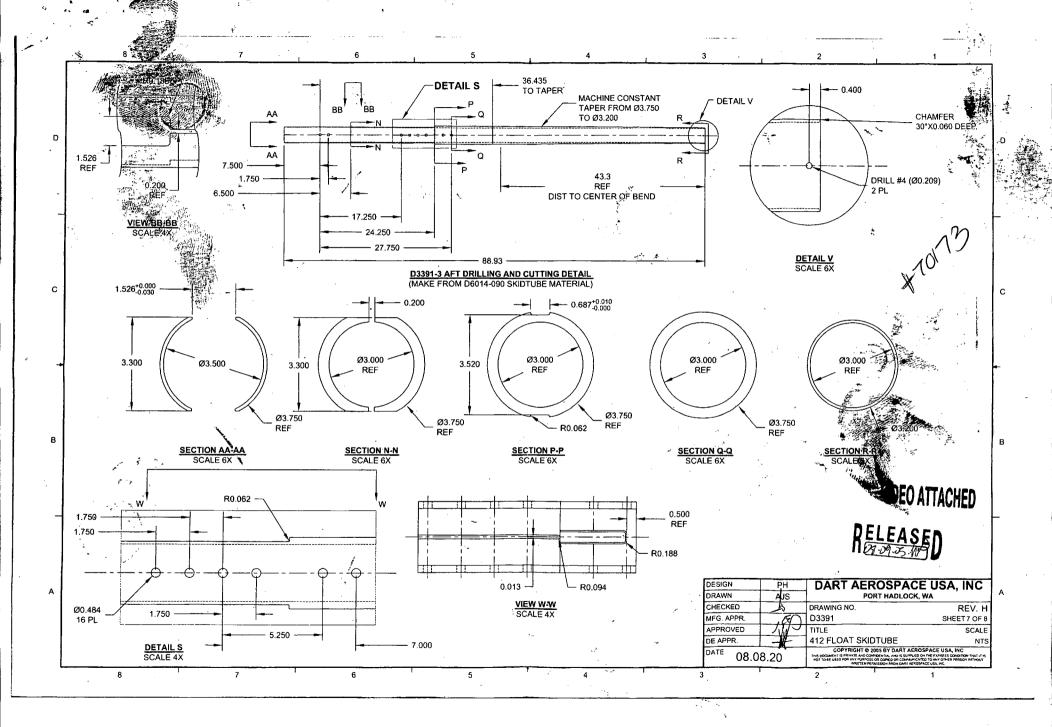
Duitho	ospaoi	Liu											
W/O:		WORK ORDER CHANGES											
DATE	STEP	PRO	CEDURE CH	ANGE	В	/	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
Part No	•	PAR #:	Fault Ca	tegory:	NCR: Y	es N	o <b>DQ</b>	A:	Date:				
	R	esolution:	Disposit	ion:	QA: N/	C Clos	sed:		Date: _				
NCR:		1	WORK OR	DER NON-CONFORMA	NCE (N	ICR)							
DATE	STEP	Description of NC		Corrective Action Section		gn &	Verific	ation	Approval	Approval			
DAIL	SIEF	Section A	Initial Chief Eng				Secti		Chief Eng	QC Inspector			
	ì												
				· · · · · · · · · · · · · · · · · · ·									
				·									
}	1												



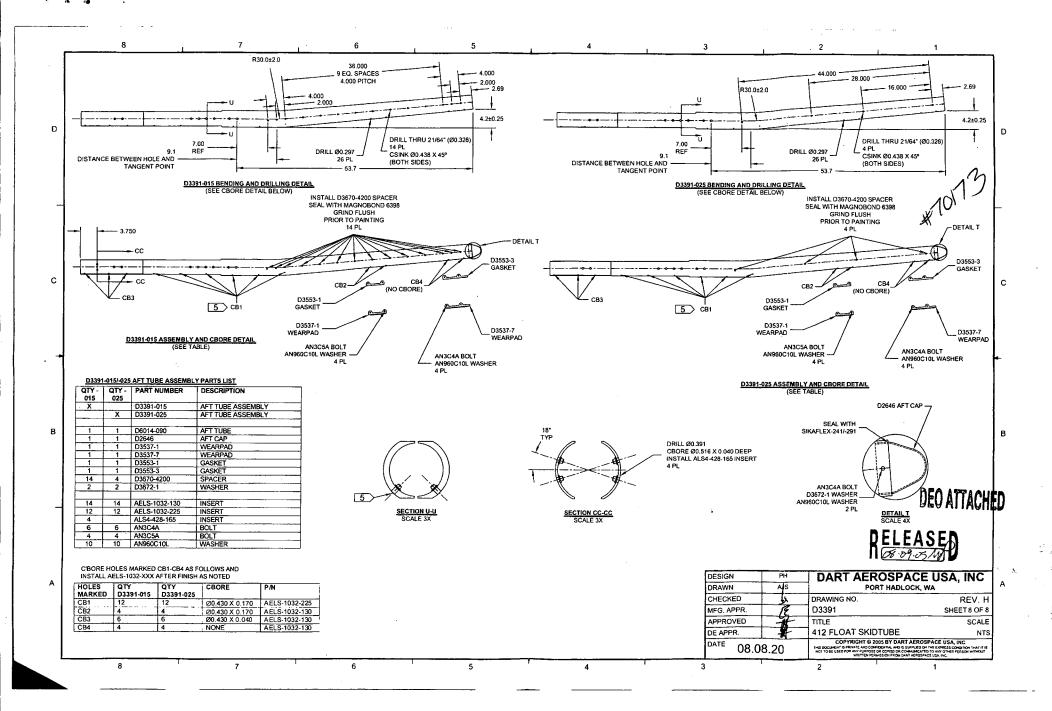
Dart Ae	rospace	Ltd						/	<b>/</b> \
W/O:			W	ORK ORDER CHANGE	S		-	<del></del>	<del>/</del>
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
									·
<del></del>					-				:
				•			•		
Part No	:	PAR #:	Fault Cat	legory:	NCR: Yes	No DQ	A:	Date: _	
	Re	esolution:	Dispositi	on:	QA: N/C	Closed:		Date: _	<del></del>
NCR:		V	ORK ORI	DER NON-CONFORMA	NCE (NC	R)			
DATE	CTED	Description of NC		Corrective Action Section		Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat	& Sect	ion C	Chief Eng	QC Inspector
	1								



W/O:			14	VODY ODDED	SUANOFO			• •		
DATE	STEP	PRO	OCEDURE CH	VORK ORDER (	CHANGES	Ву	Date	Qty	Approval Chief Eng /	Approval
						-,			Prod Mgr	QC Inspector
	,		•							
				t .						
			·							
									,	
									*	
									en with	
Part No	•	PAR #:	Fault Ca	tegory:	NC	R: Yes 1	No DQ	<b>A:</b>		3
		esolution:			•			•		
NCR:				DER NON-CON			)			
		Description of NC		Corrective Actio	n Section B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Action Descri Chief Eng Chief Eng		cription	Sign & Date	gn &   Section C		Chief Eng.	QC Inspector
				·					•	
-										
	1.					D.		. *		
<u> </u>										
	196.7 (m. 196.7 )		.,							راجعا
				ı						
	2 <b>4</b>		·		•					
.,3	· ·		:			7		• .	**:	
- -								-		
363 363	*.									



W/O:			W	ORK ORDER CHANG	ES					
DATE	STEP	PROC	EDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
										·
						<i>:</i>				
Part No	:	PAR #:	Fault Cat	egory:		R: Yes N	lo DQ/	\\ <b>\:</b>		
Resolution:			Disposition: QA: N/C Closed: D							
NCR:	.,	W	ORK ORE	DER NON-CONFORMA	ANCE	(NCR)				
		Description of NC		Corrective Action Section	ion B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Section C  Date			Chief Eng	QC Inspector
						orthodox song		·	· ·	
•								·		
		3			•			· · · · · · · · · · · · · · · · · · ·		
		301							·	
							· · · · ·		,,,,	



Dart Ae	rospace	e Ltd							
W/O:			WO	RK ORDER CHANGES		<del>-</del>			
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	):	PAR #:	Fault Categ	gory: i	ICR: Yes	No DQ	A:	Date: _	
	R	esolution:	Disposition	n: (	A: N/C CI	osed:		Date: _	
NCR:			WORK ORDE	ER NON-CONFORMAN	CE (NCR	)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section E Action Description Chief Eng	Sign &		cation ion C	Approval Chief Eng	Approval QC inspector

DRAWING	NO.	TITLE		REV. H	DART AEF	ROSPACE US	SA, INC D.E.O.	NO.	SHEET N	10.	SCALE
D3391		412 FLOAT	SKIDTUBE	,	ENGIN	<b>EERING ORD</b>	<b>DER</b> D339	1-H-1	SHEET 1 C	DF, 1	NTS
DRAWN	Ú.	7	CHECKED	l,	MFG. APPF	₹. 🔬	APPROVED	Ny)	DE APPR.	<b>4</b> > .	
DATE	09.09.	.23	DATE	04.04.24	DATE	09/09/25	DATE	09/09/30	DATE 🔗	09/30	, ,

#### **PURPOSE:**

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/-043 SKIDTUBES.

#### **CHANGE:**

AMEND NOTE 2 OF D3391-041/-043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH-AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

DELEASED 2010 -02- 0 2

AMP.

*1011³

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DATA REROSPACE USA, INC.

Dail Ac	Ospace	Eta			/					and the
W/O:			WO	RK ORDER CHAI	NGES		· ·		716	44.0
DATE	STEP	PRO	CEDURE CHAN	GE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		•								
				it.	·			- 1	.,	
										·
•	·									
Part No	•	PAR #:	Fault Categ	ory:	NCF	R: Yes I	lo DQ	A:	Date: _	<u>:</u> .
	Re	esolution:	Disposition		QA:	N/C Clo	sed:		Date:	
NCR:		V	VORK ORDE	R NON-CONFOR	MANCE	(NCR)				<del></del>
		Description of NC			Section B		Verification		Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	on	Sign & Date	Section C		Chief Eng	QC Inspector
								· · · · · · · · · · · · · · · · · · ·		·
·										-
								<b>ૻ</b>		
							_			
<b>***</b> 2				4	<b>€.</b> ₹					
		· .		*						